DOCUMENT RESUME

ED 406 035 PS 025 259

AUTHOR Gardner, Ruth F.
TITLE How Do Early Childhood Teachers Support Young Children's Learning?
PUB DATE 96
NOTE 11p.; In: Australian Research in Early Childhood Education. Volume 1, 1996; see PS 025 254.
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Foreign Countries; Learning; Pilot Projects; Preschool Children; Preschool Education; *Teacher Behavior; Teacher Effectiveness; Teacher Influence; Teacher Role; Teacher Student Relationship; Teaching Methods; *Teaching Styles
IDENTIFIERS Australia (Western Australia); Mediated Instruction; Mediated Learning Experience; *Scaffolding

ABSTRACT

This pilot study examined teaching strategies used by experienced early childhood teachers to scaffold their students' learning in pre-primary classes. Five teachers were involved; each was visited three times and videotapes were taken of teacher interaction in a range of classroom settings. The teacher language was transcribed from the videotapes and these transcriptions were coded using three different coding systems. The analyses of the codes confirmed that: (1) the teachers employed indirect teaching styles, with frequent use of questioning to actively engage children in ongoing learning situations; (2) the content of the teachers' talk was mainly focused on the tasks or activities at hand; and (3) categorizing teaching interaction on a modified Brodekamp and Rosegrant (1992) Teaching Continuum provided individualistic profiles of teaching behaviors along the continuum from indirect through mediating to direct teacher regulation. Further, there was evidence that the goals or intentions expressed by the teachers during interviews were reflected in the styles of interactions sampled from their teaching and coded according to the teaching continuum. Such a descriptive profile of samples of their interactions may help teachers manage their future scaffolding interactions with increased awareness and intent. (Contains 18 references.) (Author)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

HOW DO EARLY CHILDHOOD TEACHERS SUPPORT YOUNG CHILDREN'S LEARNING?

Ruth F Gardner
Curtin University of Technology

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☐ This document has been reproduced as received from the person or organization originating it.
X Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ED 406 035

ABSTRACT

A pilot study was conducted to get a profile of the teaching strategies being employed by experienced early childhood teachers to scaffold their pupils' learning in their pre-primary classes. Five teachers were involved and each was visited three times and videos were taken of teacher interactions from a range of classroom settings. The teacher language was transcribed from the videos and these transcriptions were coded using three different coding systems. The analyses of the codes confirmed that: (i) the teachers employed indirect teaching styles, with frequent use of questioning to actively engage children in ongoing learning situations; (ii) the content of the teachers' talk was mainly focussed on the tasks or activities in hand; (iii) categorising teaching interactions on a modified Bredekamp and Rosegrant (1992) Teaching Continuum provided individualistic profiles of the usage of teaching behaviours along the continuum from indirect through mediating to direct teacher regulation. Further, there was evidence that the goals or intentions expressed by the teachers during interviewing were reflected in the styles of interactions sampled from their teaching and coded according to the teaching continuum. Such a descriptive profile of samples of their interactions may help teachers manage their future scaffolding interactions with increased awareness and intent.

INTRODUCTION

In the last few years, Early Childhood teachers in Western Australian schools have been faced with multiple, changing requirements. These include the curricula-based changes with the 'First Steps' syllabus documents which have now become 'whole of school' projects, requiring teachers to submit student continuum ratings. Currently, the 'Outcome Statements' are being adopted, commencing at Year 1, and a trialing of K (pre-primary) descriptors is under way in 1995. The 'Social Justice Statements' also set requirements for teachers to address gender equity, respect and accommodate multi-cultural differences, and have an inclusive program for children with special needs. At the same time, organisational changes are occurring with the move from sessional to full-day programs for five year old children (K year) and the piloting of multi-aged groups involving K to Year 3 classes in the junior primary.

Early childhood teachers have sought to meet these changing requirements and supportive information has been provided through professional development programs. However, some teachers have expressed concern that the 'whys' for change are addressed, but the 'hows' are largely ignored, with the responsibility for appropriate resolution being left to the individual classroom teacher. In Early Childhood education, discussions of how we should teach, and strategies teachers can employ to enhance children's learning, are often inhibited or made vague by the lack of a precise language to describe different teaching interactions. Indeed, many studies which have reviewed early childhood practices rue the fact that, while there may be commonality of language amongst practitioners, it is not reflected in a consistency in practice between teachers (Bruce, 1987; van der Eyken, Osborn & Butler, 1984; McAuley & Jackson, 1992). While this position is not unique to early childhood education, it appears to be heightened at this level of education. Teachers are working with young children prior to the age when academic demands

PS025259

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY
Marilyn Fleer
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

BEST COPY AVAILABLE

provide a framework for more predictable patterns of teaching interactions. McAuley and Jackson (1992) cited David Hartley (1987:59) as having stated:

> *That is why, in the nursery school, there does not appear to be a formal curriculum which is transmitted by an obviously didactic teaching style. All that one can see, so to say, is the hidden curriculum, for there does not appear to be any teaching going on.*

It must be acknowledged that describing how Early Childhood teachers teach is not well supported by current terminology. Thus if teachers are to be assisted to reflect on their current practice and to make any adjustments to accommodate changes in the educational setting two questions arise:

1. What teaching strategies are teachers currently employing? and

2. How can these strategies/interactions be described to enable clarity in communication between teachers, and aid teachers' self-evaluation of their practice?

STUDY DESIGN

This study addressed these questions by filming a selection of teacher interactions and then describing the interactions in ways that would convey the underlying strategies being employed. The study involved five teachers, all located in the south east suburban area of Perth. The teachers were all employed by the Education Department of Western Australia, teaching in mainstream Early Childhood centres catering for five year-old children. Two of the teachers were working in pre-school centres, which were not attached to schools, and offered half-day sessional programs. The other three teachers were in pre-primaries located in primary schools, and here full-day programs were provided. The teachers were selected on the grounds that they were experienced, with five years of teaching being the minimum length of service, through to more than twenty years of teaching.

A sociocultural perspective was taken for this study, recognising the importance of the social context in shaping children's cognitive growth. Sociocultural theory argues that the child's use of tools, strategic behaviours and consciousness originate from the social interactions experienced by the child in daily living. The social interactions that occur between a young child and adult, such as a parent or teacher, or another child, such as a sibling, peer or older school friend, can generate the opportunity for the child to acquire new skills and understandings. Katz and Chard (1989) have described this as the dynamic view of development which gives credence to diversity in learning styles which can arise from differing social contexts and, thus, considers the need to be sensitive to the individual learner. This approach has direct implications for teachers. As Cullen (1994: 59) states:

> *The dynamic view of development gives a much stronger role to the teacher. From this perspective, teachers adopt an interactive style of teaching in which their teaching strategies are contingent upon the level of understanding and skills the child brings to the learning tasks.*

It is the interactive style of the teachers that this study sought to investigate by identifying the strategies the teachers employed to scaffold their pupils' learning.

Each centre was visited three times, twice in Term 1 and once in Term 2. Videos were taken of whole-group mat times (excluding story reading or music activities), fruit and drink times (to sample a routine activity), indoor activity times and outdoor activities. From each of these four different settings, a ten minute sequence was selected and yielded a total of 9 hours and 20 minutes. The criterion for selection of a sequence was that it included extended teacher interactions to provide sufficient data for meaningful analysis. The selections were made by the research

assistant who had filmed the classes and was familiar with the theoretical context and the classroom settings. Thus, these sequences focused on the strategies that required a predominance of teacher talk and were therefore not necessarily characteristic of the full range of a teacher's behaviours. The teacher language and, where audible, the child's language for these sequences was transcribed and coded according to three coding systems.

Coding Systems

Initially, two independent coding systems were used, as these had been successfully applied in previous studies to analyse parent-child interactions. The first coding analysed the adult language for indirect forms of language interactions (statements, questions and affirmations) compared with direct forms of language (directives and negations) to reveal the predominant style of the adult's teaching interactions (Renshaw & Gardner, 1990; Gardner, 1991). When learning is the central aim of a social interaction, the more indirect dialogue opens up more opportunities for the child to actively and cognitively engage in the ongoing process. A more direct style of adult interaction restricts the child to the more passive position of 'other regulation' (Wertsch, Minick & Arns, 1984; Renshaw & Gardner, 1990; Gardner, 1991). The second form of coding has been used to discriminate between adult speech which is focussed on the task versus adult attention to the child's conduct (Bus & Van Ijzendoorn, 1989; Gardner, 1991). Research has demonstrated that the child's learning is supported when adult verbal content is mainly focussed on the task in hand (Rogoff, Ellis & Gardner, 1984; Bus & Van Ijzendoorn, 1989; Gardner, 1991).

These two forms of coding provided positive findings for the nature of teachers' language during interactions; the teachers' language styles were indirect and supported children's input, and their talk helped to focus the children's attention on the ongoing activities or interests. These findings confirmed the expectation that experienced educators would interact with learners in this way. However, these two forms of analyses did not convey the strategic nature of the teachers' dialogue and, thus, had failed to address the central issue of this study. The teachers' questions, statements or directives were not random or unconnected and it became clear that, to reveal the structure of teachers' purposeful interactions, a further level of analysis was required. The 'Teaching Continuum' set out by Bredekamp and Rosegrant (1992) appeared to provide a means to address this issue. The continuum identifies teacher behaviours from non directive through mediating to directive. It is the application of this continuum as a tool to identify differing patterns of interaction used by teachers as they work with young children that is the major focus of this discussion.

Teaching Continuum Coding

The Teaching Continuum devised by Bredekamp and Rosegrant (1992:39) details forms of specific teaching behaviours which set the framework for this further categorisation of teacher language. The terms and definitions provided by these authors were applied as a means to provide a profile of the types of strategic behaviours the individual teachers employed in their interactions with the children. Bredekamp and Rosegrant (1992:39) state:

> *The truth is that teachers of young children make hundreds of decisions each day about which specific teaching behaviour or form of adult assistance is appropriate for this child in this situation at this point in her or his process of learning. To help visualise the complexity of the options teachers face, we offer a continuum of teaching behaviours.*

TEACHING CONTINUUM

NON DIRECTIVE ..... MEDIATING..... DIRECTIVE

Acknowledge/ Model / Facilitate / Support/ Scaffold / Co-construct / Demonstrate/ Direct

The definitions stated by Bredekamp and Rosegrant (1992:39-41) for each category were used to discriminate the verbal behaviours recorded in the transcripts. Two modifications were made to the existing Teaching Continuum. It proved difficult to discriminate between *facilitate* and *support* in these samples. Bredekamp and Rosegrant state:

> *Supporting learning is similar to facilitating but differs in the degree of adult involvement. In a facilitating situation the child has greater control, for example, sending a message to let go the back of the bike, while in offering support the teacher and child together determine when the support is no longer necessary. Supported learning is similar to providing a fixed scaffold like training wheels on the bicycle, which allow the child to participate but with clearly available assistance.*

This fine difference in interactions may be more crucial and more obvious when working with younger children, or if children are engaged in physical skills which have several steps leading to mastery. The interactions that were recorded in this study focussed more on cognitive or social learning situations with the physical behaviours employed being within the children's existing competencies. More clarity in identifying teacher behaviours could be achieved by moving from the mediating level of *scaffolding* to the more indirect level of *facilitation* and, thus, the category of *support* was not used.

The other modification involved an addition to the categories. The teachers would often provide information, engage children in discussions about topics, or set out behavioural requirements in advance of a situation (e.g., setting limits about how to walk to the school library during the group mat session). The information was being introduced to the children by the teacher and the teacher was clearly in control of how the information would be given and what would be discussed. This level of teacher regulation excluded these behaviours from the mediating interactions of the *scaffolding* category. However, it was also outside the precise definitions for *co-construction* or *demonstration*, and the definition of *direct* requires that it be used 'in the narrow sense for situations in which the parameters are very tight and children must be given specific directions to do something one way' (Bredekamp & Rosegrant, 1992:41). To include this important interaction in the categorisation of teacher behaviours the term *structure* has been selected. On the Teaching Continuum it sits between *co-construct* and *demonstrate*. The behaviours can be defined as the teacher setting up a situation. Characteristically, the teacher will introduce a topic and, by questioning, confirm children's current knowledge and understanding. The teacher clearly leads and shapes the discussion. This level of teacher regulation is also evident when reminding children of appropriate behaviour, but it is not *direct* as it does not require an immediate or narrow behavioural response from a child. It was this modified Teaching Continuum that was applied in the third coding of the transcripts:

MODIFIED TEACHING CONTINUUM

NON DIRECTIVE ..... MEDIATING ..... DIRECTIVE

Acknowledge/ Model/ Facilitate/ Scaffold/ Co-construct/Structure/Demonstrate/Direct

When using this modified Continuum to code the transcripts, a complete sample from one teacher, and part of a second teacher sample, were coded independently by the author and the research

BEST COPY AVAILABLE

assistant. Comparison of the two codings showed a high level of comparability. The application of categories such as *structure, scaffold* and *facilitate* were very similar, these proving to be the core strategies. The differences between the coding interpretations were mainly on the fine differentiations such as whether to code an *acknowledgment* as separate from *facilitation*, or interpret the commendation as part of an ongoing facilitating strategy. A joint review of the total context from the original transcript/videotape enabled a consensus to be reached on these points of discrepancy. The guiding principle that was applied to make a discrimination between the strategies was the level of adult regulation in evidence during an interaction. The research assistant completed the coding of the other transcripts and, if faced with a real uncertainty, she returned to the video of the event to place it in its total setting.

Results of the Modified Teaching Continuum Coding

The outcome of this coding process provided summaries of each teacher's interactions and conveyed a spread across the continuum for each teacher. The nature of the ongoing activity of the sampled interaction strongly influenced the specific style of interaction, rather than the more general setting. For instance, one mat session sample may be predominantly coded as structure (92% of the utterances), while the next sample will reveal mainly scaffolding interactions (76%). Two teachers had predominant styles in all settings, one favouring facilitating interactions (49% of total utterances) while the other employed scaffolding most consistently (38% of total utterances). The other three profiles had no dominant interaction. Further sampling of teaching interactions could confirm whether teachers had characteristic patterns of interaction, as the coding did provide individualistic profiles. All the teachers had frequent changes in their style of interaction within the ten minute sequences. For instance, during an indoor activity time, one teacher had 44 changes in interactions involving 146 utterances. In this particular ten minute sequence, the longest sustained strategy was 18 utterances focused on scaffolding, though facilitation was the strategy used most often, scoring 30% of the teacher's total interactions of this sequence.

Teacher Interviews

One means of evaluating the effectiveness of the strategic interactions employed by the teachers is to review student outcomes, but such a review was beyond the scope or purpose of this study. The other important measure is to compare the actual styles of interactions conveyed through the coding with the intentions or 'motives' of the teachers themselves. To find out how each teacher approached her teaching, an interview was conducted with each of the teachers after all the filming was completed. The same questions were given to all five teachers and the responses were audio-taped to allow for later analysis. The format of the interview was developed to address issues that arise in sociocultural theory and that help to provide insight to each teacher's goals for her teaching.

From sociocultural theory, it has been emphasised that when goals give direction to the social interactions between a 'novice' and an 'expert' this creates the potential for learning to be an outcome (Vygotsky, 1978; Wertsch, Minick & Arns, 1984; Rogoff, 1990). If the goal is shared by all participants, the effectiveness of the social interaction to generate learnings is enhanced. Conversely, if the novice is unaware of the purpose or goal of the interaction or holds a different expectation from the expert the desired outcomes may not be realised. Wertsch et al (1984) described the goals or motives as occurring in an inter-related, three-tiered framework. Firstly, there is a broad goal that is embedded at the institutional level of the culture and gives definition to a context and whether the interactions should be interpreted as work, instruction or play and structures the appropriate social interactions that occur. At the next level, the goals are formed in anticipation of the specific tasks or purposes of shared activities; that is, the intention, 'what must be done'. The third goal is at the level of operation, 'how it can be done' and gives form to the actual strategies employed while performing the task. This final level is the most dynamic, as adaptations may occur in response to behaviours evident during the activity. The questions in the interview focused on the goals the teachers set at the 'what must be done' level, to gain some

insight into their aims and expectations. The videos provided the evidence of 'how it can be done', the operational goals.

The interview commenced with a broad question:

- When you consider the pre-primary year, what learning goals do you have in mind for the children that gives direction to your teaching?

To this question there was a strong commonality in the responses. For all the teachers, the social aspect of development was a dominant issue. The teachers described the need for the children to develop independence: separating from mother, coping on their own, looking after their own belongings and making their own choices and becoming independent learners. The other social/emotional focus was accepting being a member of a group; getting along with each other, thinking about the feelings of others, knowing the boundaries of how to behave in a group. Two teachers saw as equally important the development of self-motivation, or the 'love of learning'. Effective language skills and early literacy were also acknowledged, but establishing the children confidently in their new social context was paramount.

The next three questions narrowed the focus to the goals of the specific school terms and the four selected settings of the video samples. Then the question was put whether children have their own goals or expectations when they engage in activities. The teachers reported that occasionally a child would state a desire in advance and set about the task with purpose. More generally though, teachers felt that the process of the activity was the source of interest rather than a preset goal. As to a difference in approach by a child to teacher-directed/initiated or child-selected activities, the interest in the activity was still seen as the most likely factor to influence the child's level of engagement. This is in line with the discussion by Rogoff et al (1993) that for young children 'appropriation' of skills and knowledge occurs through their involvement in ongoing activities, rather than the two staged process of external to internal planes attributed to the construct of 'internalisation'. Rogoff (1990) emphasises that the adult/child interaction is one of 'guided participation' where the adult and child co-construct meaning through their shared activity and discourse as they jointly engage in tasks. Through this participation in a responsive interaction, young children learn to manage social activities and carry these skills into future similar settings. Thus, the appropriation of skills and knowledge occurs as young children form new understandings in the process of their involvement in interesting activities.

All the teachers considered that children approached the whole group mat times differently from the individual or small group activities and this setting required much more demonstrative behaviour by teachers to gain and hold the children's attention. As one teacher explained:

> *When children are doing their own thing you are interested along with them, and you talk to them about what they're doing. I don't like to intervene and say 'well how about you do it this way'. I'd rather they do it the way it occurred to them, so I just like to take an interest really. But with the mat ... you've got to be a star performer at mat time. When you've asked them to come, when they're not self-motivated to be there, then you've got to be overt and exciting; you've got to be an entertainer in order to gain their interest - so, yes, its very different.*

The final question addressed the study itself:

- When I approached you to participate in this study, I said I was interested in developing a profile of teaching behaviours that experienced teachers employ to scaffold or support children's learning. From that information what do you think I will be looking for in this study?

The responses were in line with the stated intent of the study, such as, *'the ways teachers interact with children', 'gathering different styles of teaching techniques to enhance different learning situations that children find themselves in'* and *'strategies that seem most effective for the setting'*. Comments were made by several of the teachers that, when they were working with student teachers, they became more conscious of their teaching behaviours. In particular, they realised that many of their teaching behaviours were responsive to individual children based on their accumulated knowledge of the individual. Thus, it was often hard to make explicit to student teachers why they were doing what they were doing, as the adaptations were so spontaneous and child-specific.

An Evaluation

The information from the interviews provided the teachers' ideas of '**what** must be done', while the Teaching Continuum profile of behaviours has provided evidence of '**how** it can be done'. Determining whether there is consistency between these two levels, the intention and the actual, provides a means of evaluating the effectiveness of the strategies the teacher has employed. It also provides a test of the measurement instrument; that is, can individual differences in the strategic teaching behaviours be clearly represented? The results at this point are very promising. There are clear indicators that the profiles are individualistic and do target key behaviours teachers seek to exhibit. The profiles of two teachers particularly illustrate these two points.

One teacher stated in the interview that, rather than tell children what they should do, she liked to get in and do something herself, thereby modelling her own interest. From this example of engaging in an activity, she found children would ask, 'what she was doing and could they join in?' She saw this as a strategy for fostering self-motivated learning in children and a willingness to find things to interest themselves. Thus, during the interview she identified 'modelling' as a strategy she liked to use. The interview was held before this measurement instrument had been considered, and the research assistant who completed the coding was not involved in the interviews and, thus, was not aware of the individual teacher's goals. In the definitions to discriminate behaviours along the Teaching Continuum, Bredekamp and Rosegrant (1992) differentiate between implicit and explicit modelling but both are recorded at the same point in the continuum of regulation. This teacher's profile indicated that she used *modelling*, in both forms, more frequently and more consistently than any of her colleagues and, overall, in 8% of her interactive strategies. Thus, the profile does demonstrate congruence between the teacher's stated aims and her teaching behaviours.

Another teacher, during the interview, placed particular emphasis on making the children feel comfortable and confident in their new social setting. Quite a number of her pupils had found separating from their mothers difficult at the start of the year, and thus she was concerned to make her class a warm and welcoming environment. This teacher's profile showed *acknowledgment* and *facilitation* being frequently and consistently used, both these strategies being associated with accepting children and showing them positive regard. Again, there was evidence of congruence between intent and action on behalf of the teacher.

DISCUSSION

The Teaching Continuum does provide a descriptive tool of the style of interactions a teacher is employing but clarification is required. The Continuum has used specific terms which, in other contexts, do not have such narrow definitions, in particular, the term 'scaffold'. The coining of this metaphoric term has been attributed to Bruner and his colleagues. From their research with child/adult dyads working at joint problem-solving, Bruner analysed the adult's teaching behaviours that he considered as *scaffolding* the child's learning. Bruner identified a set of interactive behaviours that were evident in the dyadic interactions of his study (Smith & Cowie, 1991). While the list of behaviours are actions that are likely to occur in teaching interactions, they were derived from a context-specific setting. As sociocultural research has moved from the study

of dyads into the group settings of classrooms, this rather prescriptive definition has been challenged. It is of concern that the narrow interpretation of scaffolding or a structured form of knowledge transmission has been used to justify 'conventional didactic teaching, including rote, drill and practice' (Hatano, 1993:154) as being consistent with Vygotskian theory of learning. Moll and Whitmore (1993), drawing on Vygotskian theory, stress that it is the quality of co-operation between the child and the adult, requiring a mutual trust and active involvement, that is central to the scaffolding process. Stone (1993:178) has extended this perception by arguing that scaffolding is not occurring in singular social interactions, but rather the ongoing relationship of student and teacher provides for 'a more enduring dimension of repeated interactions'. Teachers are very aware of their relationships with individual students and adjust their interactions according to their knowledge of a child, as was stated by one teacher in this study during the interviews. From classroom-based research has also come the study of the impact or influence of the group setting on the stimulation of the 'zone of proximal development' of the individual child within the group. Moll and Whitmore (1993:20) have stated:

> *The above (Vygotskian) theory suggests that it is incorrect to think of the zone as solely a characteristic of the child or of the teaching, but of the child engaged in collaborative activity within specific social (discourse) environments. From our perspective, the key is to understand the social transactions that make up classroom life.*

Thus, the lively and purposeful interactions of children and teachers, which accommodate to the needs and interests of the groups and individuals within groups and flow together to form a classroom's life, create the 'sociocultural system' within which children learn. What Moll and Whitmore (1993:20) propose is *'a 'collective' zone of proximal development'* which gives due emphasis to the richness and complexity of classroom-based teaching and learning, a complexity that demands sensitivity, scope and flexibility in the teacher's range of scaffolding behaviours.

CONCLUSION

The purpose of this small study was to investigate the interactive strategies teachers are currently using in their teaching of young children. If the study can identify key teaching behaviours and provide clear descriptors of these behaviours teachers will have increased insight into their own teaching. The more understanding teachers have of the purposes and effects of differing interactions, and how these interactions can serve their learning goals, the more teachers can monitor and adjust their own practices. If changing situations demand adaptation, teachers can respond confidently if they can manage their interactive behaviours with knowledge and understanding.

REFERENCES

Bredekamp, S, & Rosegrant, T (1992). Reaching potentials through appropriate curriculum: Conceptual frameworks for applying guidelines. In S Bredekamp & T Rosegrant (Eds). *Reaching potentials: Appropriate curriculum and assessment for young children*, Vol 1. Washington: NAEYC.

Bruce, T (1987). *Early childhood education*. London: Hodder & Stoughton.

Bus, AG, & Van Ijzendoorn, MH (1989). *Storybook reading, attachment, and emergent literacy: Some experimental studies with children from lower socioeconomic status families*. Paper presented at the biennial meeting of the Society for Research in Child Development, Kansas City.

BEST COPY AVAILABLE

Cullen, J (1994). Why retain a developmental focus in early education? In EJ Mellor & KM Coombe (Eds). *Issues in early childhood services: Australian perspectives*. Melbourne: WCB Publishers International Inc.

van der Eyken, W, Osborn, AF, & Butler, NR (1984). Preschooling in Britain: A national study of institutional provision for under-fives in England, Scotland and Wales. *Early Child Development and Care*, 17:2, 79-122.

Gardner, RF (1991). *The influence of maternal teaching on the pre-schooler's self-regulation*. Unpublished MEd thesis, Murdoch University.

Hatano, G (1993). Time to merge Vygotskian and constructivist conceptions of knowledge acquisition. In EA Forman, N Minick & CA Stone (Eds). *Contexts for learning. Sociocultural dynamics in children's development*. New York: Oxford University Press.

Katz, LG, & Chard, SC (1989). *Engaging children's minds: The project approach*. Norwood, NJ: Ablex.

McAuley, H, & Jackson, P (1992). *Educating young children. A structural approach*. London: David Fulton Publishers.

Moll, LC, & Whitmore, KF (1993). Vygotsky in classroom practice: Moving from individual transmission to social transaction. In EA Forman, N Minick & CA Stone (Eds). *Contexts for learning. Sociocultural dynamics in children's development*. New York: Oxford University Press.

Renshaw, PD, & Gardner, RF (1990). Process versus product task interpretation and parental teaching practice. *International Journal of Behavioural Development*, 13 (4), 489-505.

Rogoff, B (1990). *Apprenticeship in thinking: Cognitive development in social context*. New York: Oxford University Press.

Rogoff, B, Ellis, S, & Gardner, W (1984). Adjustment of adult-child instruction according to child's age and task. *Developmental Psychology*, 20, 193-199.

Rogoff, B, Mosier, C. Mistry, J, & Goncu, A (1993). Toddlers' guided participation with their caregivers in cultural activity. In EA Forman, N Minick & CA Stone (Eds). *Contexts for learning. Sociocultural dynamics in children's development*. New York: Oxford Press.

Smith, PK, & Cowie, H (1991). *Understanding children's development*. (2nd ed), Oxford: Blackwell.

Stone, CA (1993). What is missing in the metaphor of scaffolding? In EA Forman, N Minick & CA Stone (Eds). *Contexts for learning. Sociocultural dynamics in children's development*. New York: Oxford University Press.

Vygotsky, LS (1978).*Mind in society*. *Cambridge*, MA: Harvard University Press.

Wertsch, JH, Minick, N. & Arns, FJ (1984). The creation of context in joint problem solving: A cross-cultural study. In B Rogoff & J Lave (Eds), *Everyday cognition*. Cambridge MA: Harvard University Press.

AUTHOR

Ruth F Gardner, Lecturer, Faculty of Education, Curtin University of Technology, Bentley, Western Australia 6102. Specialisations: Early childhood teaching strategies, early childhood teacher education, child development.